KENWOOD

HI/FI STEREO COMPONENTS

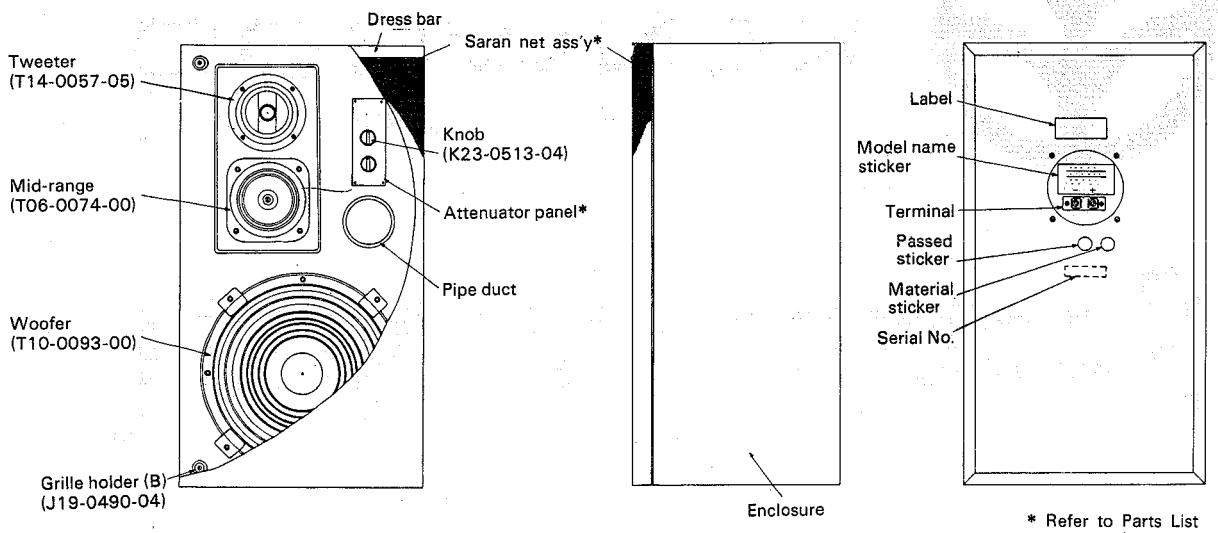
SERVICE MANUAL

LS-1600

SPEAKER SYSTEM

EXTERNAL VIEW/REPAIR

EXTERNAL VIEW



* Refer to Parts List

ABSORBER

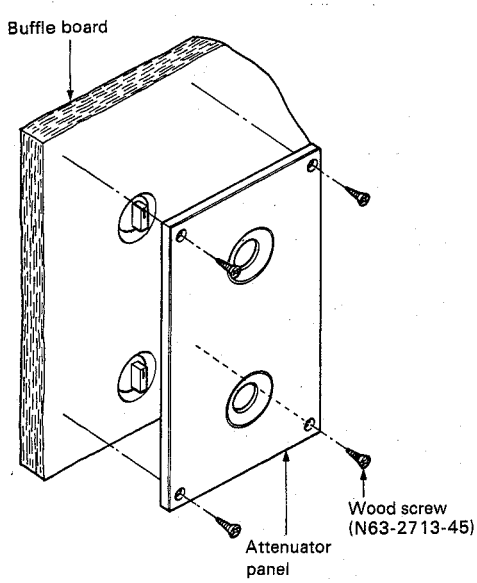
The sound quality can be changed by the positioning of absorbers. After repair or check, these absorbers must be returned to their original positions.

ATTENUATOR

The attenuator is located at the right of the mid-range. It is rotary switch type and both MIDDLE and HIGH can be adjusted in 3 steps.

1. Attenuator Name plate

The attenuator panel is fixed by the 4 wood screws.



Note:

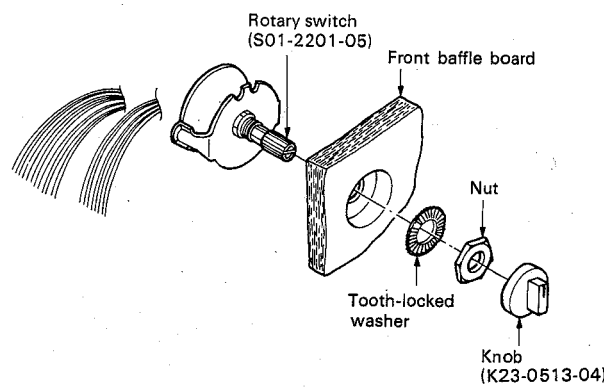
Mount the attenuator panel so that its punch-hole centers coincide with the attenuator shaft centers. The attenuator panel must assure perfect horizontality and verticality against the enclosure.

2. Knobs

When replacing the knobs, pull out them.

Note:

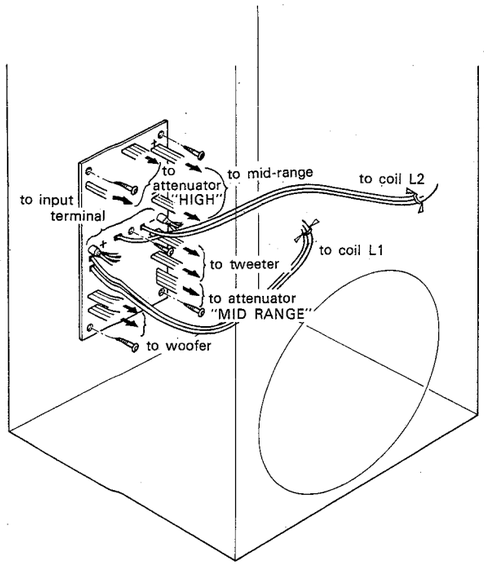
The rotary switch comes in HIGH and MID, that must be mounted correctly. Confirm the knob and panel positioning.



REPAIR/SPEAKER UNIT SPECIFICATIONS/DATA

CROSS-OVER NETWORK

The cross-over network is secured on the rear of the enclosure as shown in the following figure.
When replacing and repairing it, remove the woofer.

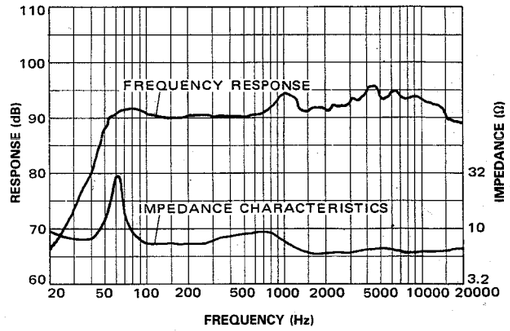


Note:

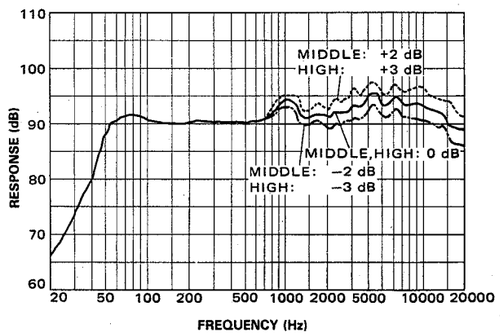
1. Coils L1 and L2 are mounted on the side board of the enclosure. (L1: Left, L2: Right)
2. Terminal of tweeter should be covered with the tube.

DATA

FREQUENCY RESPONSE AND IMPEDANCE CHARACTERISTICS



LEVEL CONTROL CHARACTERISTICS



SPEAKERS UNIT SPECIFICATIONS

LS-1600	Woofer	Mid-range	Tweeter
Power Bandwidth	* f_0~3,000 Hz	160~17,000 Hz	6 kHz~20 kHz
Sound Pressure Level	91 dB/W	91 dB/W	103 dB/W
Impedance	8Ω	8Ω	8Ω
Magnetic Flux Density (GAUSS)	7,400	12,500	15,500
Total Magnetic Flux (MAXWELL)	16,600	61,000	30,500

* f_0: 26 Hz

PARTS LIST

PARTS LIST

U.S.A.	K
Canada	P
PX	U
Australia	X
Europe	W
England	T
Scandinavia	L
South Africa	S
Other Areas	M
Audio Club	H

There is no plan for producing units of X, L and S types.

Ref. No.	Parts No.	Description	Remarks
—	A29-0283-03	Attenuator panel	☆
—	A29-0284-03	Attenuator panel (T type)	☆
—	B05-0414-02	Saran net ass'y	☆
—	B05-0415-02	Saran net ass'y (T type)	☆
—	B46-0055-20	Warranty card (P type)	
—	B46-0060-00	Warranty card (T type)	
—	B46-0061-20	Warranty card (K type)	
—	B46-0062-20	Warranty card (U, H type)	
—	B46-0063-00	Warranty card (U type)	
—	B50-2078-00	Instruction manual (K, U, W, H type)	☆
—	B50-2079-00	Instruction manual (P, M type)	☆
—	B50-2080-00	Instruction manual (T type)	☆
—	E30-1003-05	Speaker cord (U, M and H type)	
—	H01-2162-04	Carton box (U type)	☆
—	H01-2163-04	Carton box (K type)	☆
—	H01-2164-04	Carton box (W type)	☆
—	H01-2165-04	Carton box (P type)	☆
—	H01-2166-04	Carton box (M type)	☆
—	H01-2167-04	Carton box (T type)	☆
—	H01-2168-04	Carton box (H type)	☆
—	H10-1928-03	Polystyrene foamed fixture × 4	☆
—	H20-0827-04	Polyethylene cover	☆
—	H25-0078-00	Instruction bag	
—	J19-0490-04	Grille holder (B) × 4	
—	J19-0491-04	Grille holder (A) (mounted saran net ass'y) × 4	
—	K23-0513-04	Knob	☆
—	N09-0259-05	Speaker mounting bolt (M5 × 25) × 4	
—	N09-0260-05	Speaker mounting bolt (M4 × 25) × 4	
—	N09-0413-05	Speaker mounting bolt (M6 × 25) × 8	
—	T10-0093-00	Speaker unit (woofer)	☆
—	T14-0057-05	Speaker unit (tweeter)	☆
—	T06-0074-00	Speaker unit (mid-range)	☆
—	X21-1860-00	Network ass'y	☆

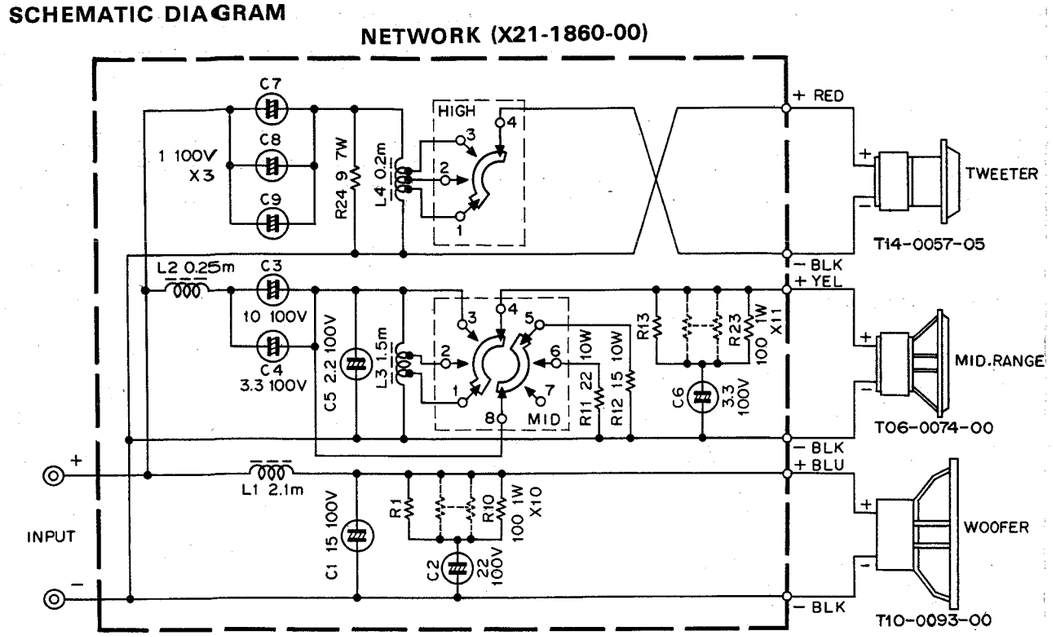
NETWORK ASS'Y (X21-1860-00)

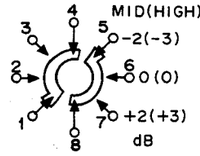
Ref. No.	Parts No.	Description	Remarks
C1,	C90-0637-05	Non-pole electrolytic 15μF 100WV	☆
C2	C90-0638-05	Non-pole electrolytic 22μF 100WV	☆
C3	C90-0636-05	Non-pole electrolytic 10μF 100WV	☆
C4	C90-0633-05	Non-pole electrolytic 3.3μF 100WV	☆
C5	C90-0631-05	Non-pole electrolytic 2.2μF 100WV	☆
C6	C90-0633-05	Non-pole electrolytic 3.3μF 100WV	☆
C7~9	C90-0630-05	Non-pole electrolytic 1μF 100WV	☆
L1	L38-0115-05	Coil (2.1 mH)	☆
L2	L38-0114-05	Coil (0.25 mH)	☆
L3	L38-0110-05	Coil (1.5 mH)	☆
L4	L38-0113-05	Coil (0.2 mH)	☆
R1~10	R47-5410-15	RS 100Ω ±5% 1W	☆
R11	R44-9722-06	RW 22Ω ±10% 10W	
R12	R44-9715-06	RW 15Ω ±10% 10W	
R13~23	R47-5410-15	RS 100Ω ±5% 1W	☆
R24	R44-9009-06	RW 9Ω ±10% 7W	
—	S01-2201-05	Rotary switch × 2	

☆ : New parts
RD : Carbon film resistor
RC : Carbon composition resistor
RW : Wire wound power resistor
RN : Meter film resistor
RS : Metal oxide film resistor

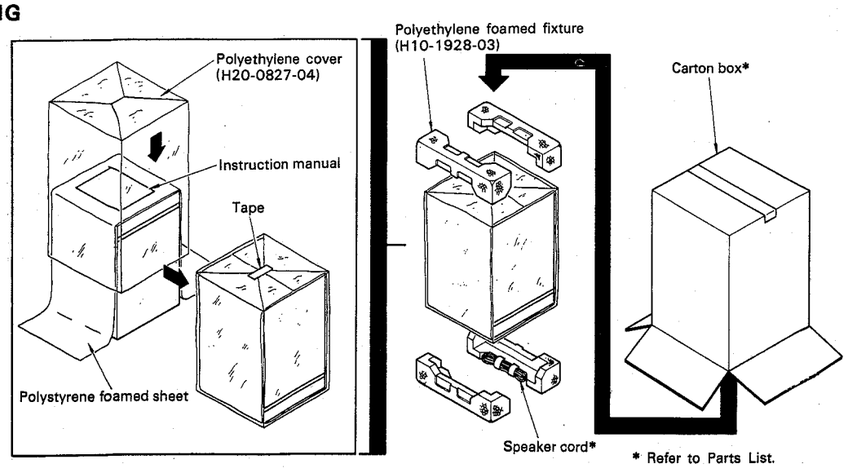
SCHEMATIC DIAGRAM/PACKING

SCHEMATIC DIAGRAM





PACKING



* Refer to Parts List.

Note: Make the system upside down first, and then put the carton box from cover it.

LS-1600

SPECIFICATIONS

System	3-Way, 3-Speaker System
Mounted Speakers	
Woofer	330 mm (13″) Cone Type
Midrange	130 mm (5-1/8″) Cone Type
Tweeter	Diffraction Horn Type
Enclosure	Bass-Reflex Type
Maximum Input Power	120 Watts
Rated Input Power	80 Watts
Sensitivity	92 dB/W at 1 m
Frequency Response	32 Hz to 20,000 Hz
Crossover Frequencies	900 Hz, 5,000 Hz
Impedance	8 ohms
Dimensions	W 390 mm (15-11/32″) H 710 mm (27-30/32″) D 323 mm (12-23/32″)
Weight	29.5 kg (64.9 lbs)
Additional Feature	Step-down attenuator level controls for Mid (±2dB) and High (±3dB) frequencies
Enclosure Finish	Construction of enclosure is particle board laminated with Walnut veneered finish.

(Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.)

A product of
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